

Sharon Ng

#12-02/03, Level 12, 12 Science Drive 2, Singapore 117549

Education

National Taiwan University, Taipei, Taiwan

- Ph.D. Institution of Occupational Medicine and Industrial Hygiene
- M.Sc. Institution of Occupational Medicine and Industrial Hygiene
- B.Sc. Department of Public Health

Professional Experience

- **Research Fellow (2015-current),
Department of Obstetrics and Gynecology, National University of Singapore**
Funding source: Supported by Translational and Clinical Research (TCR) Flagship Programme and administered by the Singapore Ministry of Health's National Medical Research Council (NMRC)
Supervisor: Prof Yap-Seng Chong, A/Prof Shiao-Yng Chan
Duties:
 - (i) Design and oversee environmental health research in GUSTO and SPRESTO
 - (ii) Work closely with women health cluster PIs in GUSTO and SPRESTO to design, plan and implement projects
 - (iii) Oversee smooth running of sub-studies, track progress, and troubleshooting
 - (iv) Responsible for SOP writing, training and data quality control, analysis, literature review, etc.
 - (v) Responsible for grant writing, report generation, scientific meeting/conference presentations and publication.

Ongoing projects:

- (i) Endocrine disruptive chemicals (EDCs) in maternal and umbilical cord plasma and their associations with pregnancy outcomes
 - Part A: Untargeted approach in 40 dyads in Singapore Chinese
 - Part B: Four major group of EDCs and their associations with pregnancy outcomes
- (ii) Trace metals in maternal and umbilical cord plasma and their associations with pregnancy outcomes
 - Part A: Screening test in 2 pooling samples for 70 metals
 - Part B: A validation study to investigate the partition of metals in different blood compartments.
 - Part C: Metals level in RBC and their associations with pregnancy outcomes

PhD student (2009-2014)

- 1 Project title: Air pollution and health impact of three municipal waste incinerators in Taipei city area.
Funding source: EPA of Taipei city
Supervisor: Prof Pau Chung Chen.

Duties: Study designs, data analysis, results interpretation and discussion report writing.
Year: 2009-2010

- 2 Project title: Investigate the work stress medical student
Funding source: -
Supervisor: Prof Pau Chung Chen.
Duties: Study design (with Dr Yu Hsuan Lin), Hair Sampling procedures, analytical protocol of hair cortisol, cotinine and caffeine, subject follow up and data management.
Year: 2010-2012

- 3 Project title: Taipei birth cohort study I and II
Funding source: Ministry of Science and Technology
Supervisor: Prof Pau Chung Chen.
Duties: subjects follow up, Coding book, Data management
Year: 2010-2013

- 4 Project title: Perfluorinated compounds, fertility, and epigenetic transgenerational inheritance: animal and prospective follow-up studies (obtain 3 years grant, start from 2012)
Funding source: Ministry of Science and Technology
Supervisor: Prof Pau Chung Chen.
Duties: Proposal writing, including: study designs and budget planning
Year: 2012

Academic teaching experience

Teaching assistant

1. Course: Environmental health statistics (2010-2013)
2. Course: Paper reading (2011-2014)
3. Course: Methods of epidemiologic research (2010)

Publications

1. Jonathan Y Bernard, Sharon Ng, Padmapriya Natarajan, Izzuddin M Aris, Mya Thway Tint, Yap-Seng Chong, Lynette Shek, Jerry Chan, Keith M Godfrey, Chin Meng Khoo, Melvin Khee-Shing Leow, Falk Müller-Riemenschneider and Shiao-Yng Chan. Associations of physical activity levels and screen time with oral glucose tolerance test profiles in Singaporean women of reproductive age actively trying to conceive: the S-PRESTO study. (under-reviewed by Diabetes Medicine)
2. Anne Chu, Izzuddin M Aris, Sharon Ng, See Ling Loy, Jonathan Y Bernard, Mya Thway Tint, Wen Lun Yuan, Melvin Khee-Shing Leow, Keith M Godfrey, Jerry Kok Yen Chan, Lynette Pei-Chi Shek, Yap Seng Chong, Kok Hian Tan, Fabian Yap, Ngee Lek, Yung Seng Lee, Chin Meng Khoo, Shiao-Yng Chan Anthropometric measures and HbA1c to detect dysglycaemia in young Asian women: The S-PRESTO cohort (Submitted)
3. Loy SL, Cheung YB, Soh SE, Ng S, Tint MT, Aris IM, Bernard JY, Chong YS, Godfrey KM, Shek LP, Tan KH, Lee YS, Tan HH, Chern BSM, Lek N, Yap F, Chan SY, Chi C, Chan JKY. Female adiposity and time-to-pregnancy: a multiethnic prospective cohort. Hum Reprod. 2018 Nov 1;33(11):2141-2149. doi: 10.1093/humrep/dey300. PMID: 30285230
4. Ng S, Aris IM, Tint MT, Gluckman PD, Godfrey KM, Shek LP, Yap F, Tan KH, Lek N, Teoh OH, Chan YH, Chong MF, Lee YS, Chong YS, Kramer MS, Chan SY. High maternal circulating cotinine during pregnancy is associated with persistently shorter stature from birth to five years in an Asian cohort. Nicotine Tob Res. 2018 Jul 19. doi: 10.1093/ntr/nty148. [Epub ahead of print] PubMed PMID:30032178; PubMed Central PMCID: PMC6211655.
5. Lin LY, Tsai MS, Chen MH, Ng S, Hsieh CJ, Lin CC, Lu FL, Hsieh WS, Chen PC. Childhood exposure to phthalates and pulmonary function. Sci Total Environ. 2018 Feb 15;615:1282-1289. doi: 10.1016/j.scitotenv.2017.08.318. Epub 2017 Oct 17. PubMed PMID: 29751433.
6. Tsai MS, Chen MH, Lin CC, Ng S, Hsieh CJ, Liu CY, Hsieh WS, Chen PC. Children's environmental health based on birth cohort studies of Asia. Sci Total Environ. 2017 Dec 31;609:396-409. doi:10.1016/j.scitotenv.2017.07.081. Epub 2017 Jul 26. Review. PubMed PMID: 28755589.

7. Chen MH, Ng S, Hsieh CJ, Lin CC, Hsieh WS, Chen PC. The impact of prenatal perfluoroalkyl substances exposure on neonatal and child growth. *Sci Total Environ*. 2017 Dec 31;607-608:669-675. doi: 10.1016/j.scitotenv.2017.06.273. Epub 2017 Jul 27. Erratum in: *Sci Total Environ*. 2018 Dec 10;644:1653. PubMed PMID: 28709101.
8. Godfrey KM, Cutfield W, Chan SY, Baker PN, Chong YS; NiPPeR Study Group. Nutritional Intervention Preconception and During Pregnancy to Maintain Healthy Glucose Metabolism and Offspring Health ("NiPPeR"): study protocol for a randomised controlled trial. *Trials*. 2017 Mar 20;18(1):131. doi:10.1186/s13063-017-1875-x. PubMed PMID: 28320484; PubMed Central PMCID:PMC5359891.
9. Huang KH, Chou AK, Jeng SF, Ng S, Hsieh CJ, Chen MH, Chen PC, Hsieh WS. The Impacts of Cord Blood Cotinine and Glutathione-S-Transferase Gene Polymorphisms on Birth Outcome. *Pediatr Neonatol*. 2017 Aug;58(4):362-369. doi:10.1016/j.pedneo.2016.08.006. Epub 2017 Jan 17. PubMed PMID: 28216421.
10. Ng S, Lin CC, Jeng SF, Hwang YH, Hsieh WS, Chen PC. Mercury, APOE, and child behavior. *Chemosphere*. 2015 Feb;120:123-30. doi:10.1016/j.chemosphere.2014.06.003. Epub 2014 Jul 9. PubMed PMID: 25014903.
11. Ng S, Lin CC, Hwang YH, Hsieh WS, Liao HF, Chen PC. Mercury, APOE, and children's neurodevelopment. *Neurotoxicology*. 2013 Jul;37:85-92. doi:10.1016/j.neuro.2013.03.012. Epub 2013 Apr 18. Erratum in: *Neurotoxicology*. 2014 Dec;45:216. PubMed PMID: 23603214.

Book:

Chen MH., Ng S., Tsai MS., Lin CC., Chen PC. (2019) Birth Cohort Consortium of Asia (BiCCA): Current Children's Environmental Health Issues in Asia and Future Perspectives. In: *Pre-emptive Medicine: Public Health Aspects of Developmental Origins of Health and Disease* (pp 189-197). Springer, Singapore

Conferences:

1. Ng S, et al. Maternal circulating cotinine concentration in pregnancy and persistent short stature in children from a multi-ethnic Asian cohort. 2017 Oct, Rotterdam, The Netherlands (Oral Presentation)
2. Ng S, et al. Maternal circulating cotinine concentration in pregnancy and offspring weight and body mass index (BMI) in the first 36 months. 2017 Oct, Rotterdam, The Netherlands (Oral Presentation)
3. Ng S, et al. In utero cotinine exposure and persistent short stature in children. 2016 Nov, PPTOX V (Oral Presentation)
4. Ng S, et al. Prenatal exposure to environmental tobacco smoke and neonatal adiposity. 2016 Sep, Rome (Poster Presentation)
5. Ng S, et al. Prenatal Mercury exposure and child health. 2014 Nov, Shanghai, China (Poster Presentation)
6. Ng S, et al. Cord blood mercury, APOE and Child's intelligence quotients. World Congress Developmental Origins of Health and Disease. 2013 Nov, Singapore (Poster Presentation)
7. Ng S, et al. Cord blood mercury, APOE, and child behavior. Conference of Reproductive Hazards in the Workplace. 2013 June, Utrecht, Netherland. (Oral Presentation)
8. Ng S, Chen PC. Prenatal Mercury Exposure, APOE4, and Child Health. International Society for Environmental Epidemiology. 2012 Aug, Columbia SC, US (Oral Presentation)
9. Ng S, Soong WT, Chan CC, Chen PC. Do municipal waste incinerators induce attention deficit hyperactivity disorder in children? International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health. 2005 Sept, Gyeongju, Korea (Poster Presentation)